

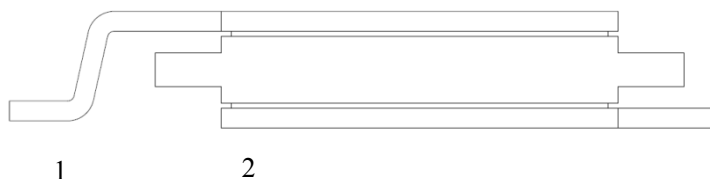
Features


- Small Size Design 10.5×8.0×1.6mm
- Current Handling Capability 5,000A @ 8/20 μs
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Moisture sensitivity level: Level 1

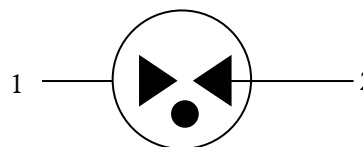
Exterior

Application information

- Communication equipment

Package (Side View)

Agency Approvals

Icon	Description
RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003
	Mean lead free

Schematic Symbol

Electrical Parameter

DC Breakdown Voltage ¹⁾²⁾³⁾	100V/s	≥ 700	V
Impulse Spark-over Voltage ³⁾	At 1kV/μs	for 99 % of measured values ≤ 1500	V
	At 1kV/μs	Typical values of distribution ≤ 1400	V
Impulse Discharge Voltage ³⁾	± 5 operations 8/20μs	5,000	A
Arc Voltage ³⁾	At 1A	~20	V
Insulation Resistance ³⁾	DC=100V	≥ 1	GΩ
Capacitance at 1MHz ³⁾	VDC=0.5V	≤ 3.0	pF
Weight		~0.35	g
Operating And Storage Temperature		-40-90	°C
Marking		Without	

1) At delivery AQL 0.65 level II ISO 2859

2) In ionized mode

3) Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

Part Numbering System

BE 701 S TW -1

(1) (2) (3) (4) (5)

 (1) Bencent Flat 2-Electrode SMD Gas Discharge Tube
10.5×8.0×1.6

 (2) Series: DC Breakdown Voltage, e.g.: 701=70×10¹=700V

(3) “S” means the Voltage : “≥700V”

(4) “TW” means 2-Electrode GDT

(5) “-1” means the special design of this asymmetrical structure

Product Characteristics

Lead Material	FeNi4J42
Body Material	Ceramics
Terminal Finish	Tin Plated

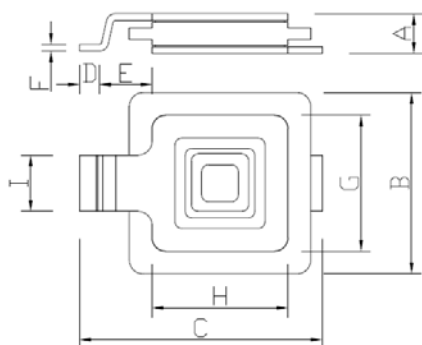
Environmental Reliability Characteristics

Testing items	Technical standards
High Temperature Storage Test	Temperature: 90℃ Time:2H
Low Temperature Storage Test	Temperature: -40℃ Time:2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45min
Resistance of soldering heat	Temperature: 260±5℃ Time of dip soldering: 10s, 1time

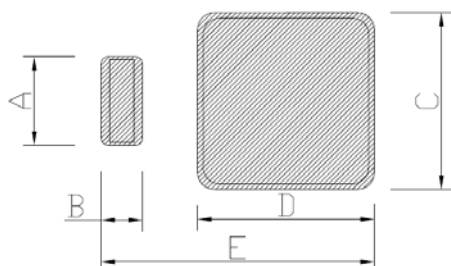
Note: Up-screen program can be specified by customer’s request via contacting Bencent service

Solderability test

Solderability	Solder Pot Temperature:	245℃ ± 5℃
	Solder Dwell Time:	4-6 seconds

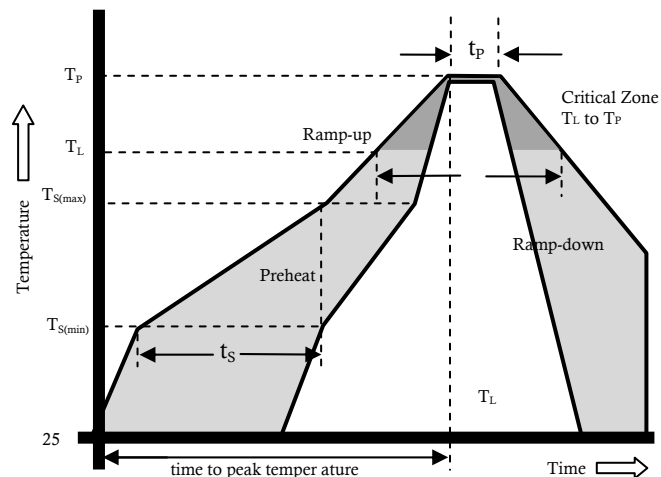
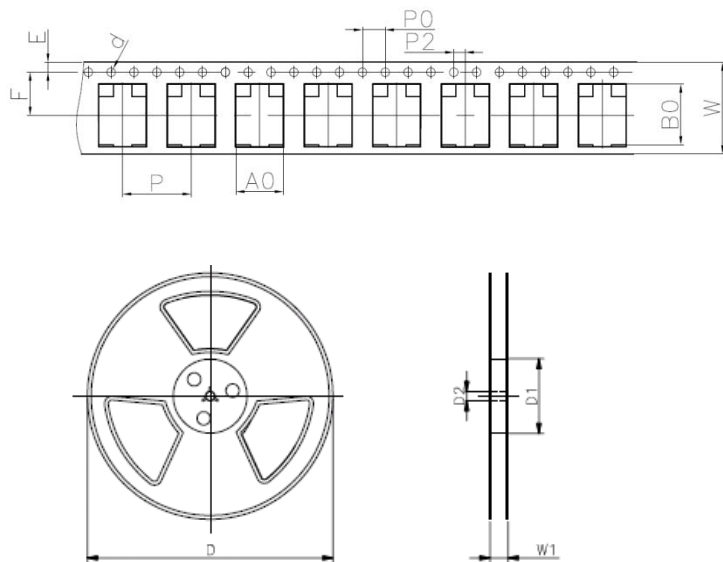
Product Dimensions


REF	mm	Inch
A	1.6±0.2	0.063±0.008
B	8.0±0.2	0.315±0.008
C	10.5±0.3	0.413±0.012
D	0.9±0.2	0.035±0.008
E	2.0±0.2	0.079±0.008
F	0.3±0.1	0.012±0.004
G	6.0±0.2	0.236±0.008
H	6.0±0.2	0.236±0.008
I	3.0±0.2	0.118±0.008

Recommended Soldering Pad


REF	mm	inch
A	3.2	0.126
B	1.5	0.059
C	6.4	0.252
D	6.4	0.252
E	9.9	0.390

Reflow Condition		Pb-Free assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time (min to max)	60 – 180 secs
Average ramp up rate (Liquids) Tmp (T _L) to peak		3°C/second max
T _S (max) to T _L - Ramp-up Rate		3°C/second max
Reflow	- Temperature (T _L) (Liquids)	217°C
	- Temperature (T _L)	60 – 150 seconds
Peak Temperature (T _P)		260+0/-5 °C
Time within 5°C of actual peak Temperature (t _p)		10 seconds max
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T _P)		8 minutes Max.
Do not exceed		260°C


Package Reel Information


REF	mm	inch
A0	8.3±0.3	0.327±0.012
B0	10.9±0.3	0.429±0.012
d	Φ1.5±0.2	Φ0.059±0.008
P0	4.0±0.2	0.157±0.008
P1	2.0±0.2	0.079±0.008
P	12.0±0.2	0.472±0.008
E	1.75±0.2	0.069±0.008
F	7.5±0.2	0.295±0.008
W	16.0±0.3	0.630±0±0.012
D	Φ 330.0	Φ 13.0
D1	Φ 50Min	Φ 1.97Min
D2	Φ 13±0.5	0.512±0.020
W1	16.8±2.0	0.661±0.079

Outline	Reel (PCS)	Per Carton (PCS)	Reel Diameter (mm)	Carton Size(mm)		
				L	W	H
TAPING	2,000	32,000	330	360	360	385